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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,224	08/27/2003	Masaki Sano	03151	4309

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EXAMINER	
MONDT, JOHANNES P	
ART UNIT	**PAPER NUMBER**
3663	

DATE MAILED: 12/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/648,224	SANO, MASAKI	
	Examiner	Art Unit	
	Johannes P. Mondt	3663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 October 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3,7,8 and 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3, 7, 8 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Amendment filed 10/25/2005 forms the basis for this office action. In said Amendment Applicant substantially amended claims 3, 7, 8 and 10, and cancelled claim 9. Claims 3, 7, 8 and 10 are the only claims still pending in the application. Comments on Remarks submitted with said Amendment are included below under "Response to Arguments".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. ***Claims 3, 7, 8 and 10*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Komoto et al as previously cited (6,340,824 B1).

On independent claim 7: Komoto et al teach an LED (light emitting diode; title, abstract, Figure 107, 23rd Embodiment; col. 49, lines 27-50) device comprising: an LED mounted on a substrate **2110** (col. 49, line 11); transparent resin (the **portion of 2140** sealing the LED within concave cup formed by the upper main surface of 2110), the transparent resin including fluorescent material (indicated by fluorescent material containing portion **FL** thereof (fluorescent layer: col. 49, lines 19-20) therein, based on a chromaticity of the light emitted from the LED (said chromaticity determines the colors available for absorption, hence for changing said chromaticity in the manner outlined);

and an outer face **AB** (col. 49, lines 33-44) of the transparent sealing resin (defined above as said portion) including a dye (material capable of selective absorption of light inherently is a dye) capable of correcting the color transmitted through the transparent resin including phosphor particles FL and sealing the LED (cf. Figure 107).

Komoto et al do not necessarily teach said fluorescent material to be phosphor particles. However, Komoto et al recites said fluorescent material as "fluorescent material or any other appropriate material having a wavelength converting function (see Abstract), while Applicant admits as prior art on page 1 of the Specification the selection of phosphor particles for said wavelength converting function (lines 19-21). Applicant is reminded in this regard that it has been held that mere selection of known materials generally understood to be suitable to make a device, the selection of the particular material being on the basis of suitability for the intended use, would be entirely obvious. In re Leshin 125 USPQ 416.

In reference to the claim language referring to "for changing a chromaticity of light emitted from the LED", intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In re Casey,152 USPQ 235 (CCPA 1967); In re Otto , 136 USPQ 458, 459 (CCPA 1963).

On claims 3 and 10: Because said dye absorbs light transmitted through the transparent resin and the color inherently represents the light NOT absorbed said dye

has a complementary color to the color of the light transmitted through the transparent resin, and hence the further limitation defined by claim 3 is met.

In reference to the claim language referring to "for a desired color of light", intended use and other types of functional language must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In re Casey,152 USPQ 235 (CCPA 1967); In re Otto , 136 USPQ 458, 459 (CCPA 1963).

On claim 8: As detailed above, claim 7 is unpatentable over Komoto et al. Komoto et al do not specifically, with regard to the 23rd Embodiment, teach the LED to be capable of producing white light. However, it would have been obvious to include a limitation on the capability of producing white light in view of Komoto et al (same reference) who in their "Summary of the Invention" state that the invention can be used easily for producing white light by including of appropriate mixes of red, blue and green fluorescent materials (col. 3, lines 23-27). *Motivation* to include the general teaching by Komoto et al also with regard to the 23rd Embodiment derives from the resulting increase in applicability of the specific embodiment to the advantageous production of white light through a simple mixing of wavelength-changing materials.

Response to Arguments

Applicant's arguments filed 10/25/2005 have been fully considered but they are not persuasive. In particular, although the objections to claim 9 are moot in view of cancellation of claim 9, all arguments of traverse pertain to the rejections of the claim language prior to the substantial amendments introduced through said Amendment filed 10/25/2005. Furthermore, Komoto et al do disclose two color changing layers, namely FL and AB, in their 23rd embodiment (see col. 49 in Komoto et al and rejections overleaf). The description by Applicant of dye as a filter is in no way different from that of a selective absorber of light depending on color, which is what the material of the absorbing layer AB performs, thus adjusting the chromaticity (col. 4, lines 13-22). Therefore, the claims as substantially amended and examined now at the earliest possible time have been rejected above as being unpatentable over Komoto et al.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johannes P. Mondt whose telephone number is 571-272-1919. The examiner can normally be reached on 8:00 - 18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack W. Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JPM
December 21, 2005

JACK KEITH
SUPERVISORY PATENT EXAMINER